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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,131	12/20/2001	Jali Williams	SSK-26 (16209)	2778

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Christina L. Mangelsen
Dority & Manning
Attorneys at Law, P.A.
P.O. Box 1449
Greenville, SC 29602

EXAMINER

WELCH, GARY L

ART UNIT	PAPER NUMBER
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3765

DATE MAILED: 05/12/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/029,131

Applicant(s)

WILLIAMS, JALI

Examiner

Gary L. Welch

Art Unit

3765

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3&5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, 7-10, 12-17, 19, 21-25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (U.S. 5,993,923).

Lee discloses an elastomeric article having an ultra-thin outer layer comprising an acrylic-based polymer and a base polymer layer adjacent and attached to the ultra-thin outer layer. The base polymer comprises an elastomeric material that is coagulated on the ultra-thin outer layer (Col. 3, lines 2-41). However, Lee does not disclose that the ultra-thin outer layer has a thickness being about 0.25 and about 0.8 microns thick.

A review of the applicant's specification reveals the claimed thickness range. However, the specification does not disclose the criticality of the claimed thickness range (i.e., why the claimed thickness is better than an outer layer having a thickness slightly more or slightly less). It is well known to one of ordinary skill in the glove making art that a thicker glove layer will provide the wearer with more protection and a thinner glove layer will afford the wearer with increased tactile sensation and dexterity.

Therefore, since the specification does not disclose the criticality of the claimed thickness of the ultra-thin outer layer, it would have been obvious through routine experimentation to manufacture the ultra-thin outer layer having a thickness between 0.25 and 0.8 microns

in order to provide a predetermined level of protection to a wearer while tending to a patient while also enabling the wearer to maintain tactile sensation and dexterity to his or her fingers.

With regard to claims 2, 17 and 25, the elastomeric material is a natural latex rubber (Col. 3, lines 2-41).

With regard to claim 3, the applicant's specification is also silent with respect to the claimed thickness of the ultra-thin outer layer being about 0.5 and about 1.5 microns. For the same reasons as mentioned in the rejection to claim 1, it would have been obvious through routine experimentation to manufacture the ultra-thin outer layer having a thickness between 0.5 and 1.5 microns in order to provide a predetermined level of protection to a wearer while tending to a patient while also enabling the wearer to maintain tactile sensation and dexterity to his or her fingers.

With regard to claims 4, 13 and 24, the applicant's specification is also silent with respect to the base polymer layer being between 3 mils and about 5.5 mils thick. It would have been obvious through routine experimentation to manufacture the base polymer layer having a thickness between 3 mils and about 5.5 mils in order to provide a predetermined level of protection to a wearer while tending to a patient while also enabling the wearer to maintain tactile sensation and dexterity to his or her fingers.

With regard to claim 5, the elastomeric article is a glove.

With regard to claim 7, the elastomeric material is coagulated through contact with the elastomeric material with a coagulant composition. The composition is applied to the ultra-thin outer layer between the ultra-thin outer layer and the base polymer layer.

With regard to claims 8 and 14, the coagulate composition is calcium nitrate (Col. 1, lines 52-63).

With regard to claims 9 and 16, the article is not chlorinated.

With regard to claim 10, the invention is disclosed in the above rejections.

With regard to claim 12, the applicant's specification is also silent with respect to the ultra-thin gripping layer being between 0.5 microns and about 5.0 microns thick. It would have been obvious through routine experimentation to manufacture the ultra-thin gripping layer having a thickness between 0.5 microns and about 5.0 microns in order to provide a predetermined level of protection to a wearer while tending to a patient while also enabling the wearer to maintain tactile sensation and dexterity to his or her fingers.

With regard to claim 15, the glove is a powder-free glove.

With regard to claim 19, the process of manufacturing the glove is disclosed in the above rejections.

With regard to claim 21, the applicant's specification is also silent with respect to the criticality of the acrylic-based polymer being heated to a temperature of between about 35 °C and about 50 °C to form the ultra-thin gripping layer. Lee discloses manufacturing gloves by heating the acrylic-based polymer to a temperature of between about 70 °C and about 100 °C (preferably 60 °C) for about 10 to 25 minutes. The higher the temperature, the longer the cure time. It would have been obvious through routine experimentation that sufficient curing of the acrylic-based polymer layer can be achieved at the claimed temperature range by subjecting the layer to heat over a longer duration (i.e., time

With regard to claim 22, the base polymer layer is formed by immersing the glove shaped former at least one time in a tank containing the elastomeric material (Col. 3, lines 2-41).

With regard to claim 23, the base polymer layer is formed by immersing the glove shaped former at least twice in a tank containing the elastomeric material (Col. 3, lines 2-41).

With regard to claim 27, the ultra-thin gripping layer is formed by dipping the former into an emulsion containing the acrylic-based polymer (Col. 3, lines 2-41).

3. Claims 6, 11 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (U.S. 5,993,923) in view of Liou (U.S. 5,534,350).

Lee discloses the invention substantially as claimed above. However, Lee does not disclose an inner layer being attached and adjacent to the base polymer layer such that the base polymer layer is between the ultra-thin outer layer and the inner layer.

Liou teaches a powder free glove having a polymer layer and two lubrication layers attached thereto (i.e., an additional lubrication layer). The additional lubrication layer enables the glove to be donned and doffed easily on a wet hand (Col. 4, lines 27-31).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide an additional lubrication layer as taught by Liou to the base layer of Lee in order that the glove may be easily donned and doffed on a wet hand.

With regard to claims 11 and 20, the invention is disclosed above.

4. Claims 18 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (U.S. 5,993,923) in view of Yeh et al. (U.S. 6,391,409).

Lee discloses the invention substantially as claimed above. However, Lee does not disclose that the base polymer layer is a nitrile polymer.

Yeh et al. teaches a powder free glove having a base layer coated with a nitrile polymer that has both good dry and wet hand donning characteristics.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the base layer of Lee with a coating of a nitrile polymer in order to achieve both good dry and wet hand donning characteristics.

With regard to claim 26, the invention is disclosed above.

5. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (U.S. 5,993,923) in view of Gallagher (U.S. 3,969,431).

Lee discloses the invention substantially as claimed above. However, Lee does not disclose that the emulsion containing the acrylic-based polymer also contains a surfactant having an HLB between 7 and about 11. The applicant's specification is silent with respect to the criticality of a surfactant for the acrylic-based polymer having an HLB between 7 and 11.

Gallagher teaches a surfactant having an HLB between 7 and 11 (i.e., 7 on Col. 4, lines 21-54) for providing a moderate hydrophilic composition.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a surfactant having an HLB between 7 and 11 as taught by Gallagher to the glove making process of Lee in order to provide the acrylic-based polymer layer with a moderate hydrophilic thereby ensuring easy donning and doffing characteristics on a wet hand.


Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Chen '607 discloses a method of making powder-free gloves. Joung '928, Hassan et al. '922, Vande Pol et al. '570, Yeh '408, Szczechura et al. '514 and Ansell et al. '771 discloses various powder free gloves.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary L. Welch whose telephone number is (703)305-0451. The examiner can normally be reached on Mon-Fri from 5:30 am to 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John J. Calvert can be reached on (703) 305-1025. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9302 for regular communications and (703)872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.


Gary L. Welch
Primary Examiner
Art Unit 3765

glw
May 6, 2003